

Application Serial No.: 10/663,334
Amdt. dated August 1, 2005
Reply to Office Action of May 13, 2005

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Currently Amended) In a linear drive device comprising a stator and an armature able to be moved linearly in relation to the stator and an electrodynamic linear direct drive system, composed of two drivingly cooperating drive means in the form of a coil means having a plurality of coaxially sequentially arranged drive coils and of a magnet means with one or more axially sequentially arranged permanent magnets, of which the one is arranged on the stator and the other is arranged on the armature and by which the armature may be subjected to a first setting force, the invention which resides in the provision of an additionally present fluid power drive system adapted to provide for fluid actuation of the

armature for the production of a second setting force independent from the first setting force, and wherein the stator further includes a peripheral wall defining a receiving space in which a drive output part of the armature is arranged for linear movement, said peripheral wall having a longitudinal slot extending through it radially, such slot extending in the longitudinal direction in the receiving space, such slot furthermore having a force output member extending through it and being sealed in a fluid-tight manner on either side of the force output member by at least one sealing tape, and ~~The linear drive device as set forth in claim 8,~~ wherein the drive means on the stator side of the linear direct drive system is a component of a stator rod extending between the terminal portions of the receiving space and through the drive output part, the stator rod being surrounded by the drive output part in a sliding manner and with a seal.

10. (Currently Amended) The linear drive device as set forth in claim 9, wherein the armature possesses two drive output parts coupled drivingly in the axial direction, of which one possesses one of the drive means of the linear direct drive system and of which the other possesses at least one axially aligned actuating face for controlled fluid actuation.

11. (Currently Amended) In a linear drive device comprising a stator and an armature able to be moved linearly in relation to the stator and an electrodynamic linear direct drive system, composed of two drivingly cooperating drive means in the form of a coil means having a plurality of coaxially sequentially arranged drive coils and of a magnet means with one or more axially sequentially arranged permanent magnets, of which the one is arranged on the stator and the other is arranged on the armature and by which the armature may be subjected to a first setting force, the invention which resides in the provision of an additionally present fluid power drive system adapted to provide for fluid actuation of the armature for the production of a second setting force independent from the first setting force, wherein the armature possesses two drive output parts coupled drivingly in the axial direction, of which one possesses one of the drive means of the linear direct drive system and of which the other possesses at least one axially aligned actuating face for controlled fluid

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actuation, and ~~The linear drive device as set forth in claim 10,~~ wherein the two drive output parts are arranged in two elongated separate receiving spaces.

12. (Original) The linear drive device as set forth in claim 11, wherein the drive output part having the at least one actuating face is piston-like in form and divides up its receiving space in a sealing manner into two axially sequentially placed space parts, of which at least one is designed for controlled fluid actuation.

13. (Original) The linear drive device as set forth in claim 10, wherein from the two drive output parts, to the same side, respectively at least one force output member extends, the force output members being kinematically coupled by a yoke means outside the stator with the formation of a force output unit.

14. (Original) The linear drive device as set forth in claim 13, comprising a guide part kinematically coupled with the force output unit and arranged to be guided in a guide recess in the stator, such unit being more especially tubular in form.

15. (New) The linear drive device as set forth in claim 9, wherein the drive output part of the armature is provided with one of the drive means of the linear direct drive system and also has at least one axially aligned actuating face for controlled fluid actuation.

16. (New) The linear drive device as set forth in claim 15, wherein the drive output part of the armature divides up the receiving space of the stator in a sealing fashion into two axially sequentially placed space parts, of which at least one is adapted for controlled fluid actuation.

17. (New) The linear drive device as set forth in claim 16, wherein both such parts of the receiving space are adapted for controlled fluid actuation.

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18. (New) The linear drive device as set forth in claim 9, wherein the drive output part is piston-like in form.

19. (New) The linear drive device as set forth in claim 9, wherein the force output member is kinematically coupled with the drive output part, which renders possible the output of force 1 outside the receiving space.

20. (New) The linear drive device as set forth in claim 19, wherein at least one force output member is rod-like in form and extends axially away from the drive output part, it extending outwardly through the terminal wall on the stator side of the receiving space.

21. (New) The linear drive device as set forth in claim 10, wherein the two drive output parts are arranged in two elongated separate receiving spaces, and wherein the drive output part having the at least one actuating face is piston-like in form and divides up its receiving space in a sealing manner into two axially sequentially placed space parts, of which at least one is designed for controlled fluid actuation.

22. (New) The linear drive device as set forth in claim 11, wherein the drive output part having the actuating face divides up its respective receiving space in a sealing fashion into two axially sequentially placed space parts, of which at least one is adapted for controlled fluid actuation.

23. (New) The linear drive device as set forth in claim 22, wherein both such parts of the receiving space are adapted for controlled fluid actuation.

24. (New) The linear drive device as set forth in claim 11, wherein the drive output parts are piston-like in form.

25. (New) The linear drive device as set forth in claim 11, further comprising at least one force output member kinematically coupled with at least one drive output part, which renders possible the output of force outside at least one receiving space.

26. (New) The linear drive device as set forth in claim 25, wherein the at least one force output member is rod-like in form and extends axially away from the drive output part, it extending outwardly through the terminal wall on the stator side of the receiving space.

27. (New) The linear drive device as set forth in claim 25, wherein a peripheral wall of at least one receiving space has a longitudinal slot extending through it radially, such slot extending in the longitudinal direction of the receiving space, such slot furthermore having the force output member extending through it and being sealed in a fluid-tight manner on either side of the force output member by at least one sealing tape.

28. (New) The linear drive device as set forth in claim 27, wherein the drive means on the stator side of the linear direct drive system is a component of a stator rod extending between the terminal portions of the receiving space and through the drive output part, the stator rod being surrounded by the drive output part in a sliding manner and with a seal.

29. (New) The linear drive device as set forth in claim 11, wherein from the two drive output parts, to the same side, respectively at least one force output member extends, the force output members being kinematically coupled by a yoke means outside the stator with the formation of a force output unit.

30. (New) The linear drive device as set forth in claim 29, comprising a guide part kinematically coupled with the force output unit and arranged to be guided in a guide recess in the stator, such unit being more especially tubular in form.